

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

### OX-GEN

Idaho TechHelp

#### OX-GEN Breathes New Life Into Non-Pressurized Oxygen Delivery Systems

##### Client Profile:

The OX-GEN Corporation was founded in June 2003 by Frank Fosella, Jr., former marketing director of Fosella & Associates, a twenty-year-old product marketing company. OX-GEN was developed around the discovery of the unique concept of a non-pressurized, non-explosive flexible oxygen generator which can be purchased without a prescription. In the past, emergency situations required an individual to dial 911 for oxygen. This innovative product allows people access to instant oxygen with just a simple squeeze of a bag or turning a few knobs. Headquartered in Boise, Idaho, the company employs 8 people.

##### Situation:

OX-GEN requested assistance from Idaho TechHelp (TechHelp), a NIST MEP network affiliate, with developing an alternative design to their current product, and/or eliminating a specific design problem.

##### Solution:

The TechHelp New Product Development (NPD) Team provided finite element analysis, engineering and design work, and rapid prototyping services to help OX-GEN develop revolutionary oxygen delivery systems as well as models used for demonstration and marketing activities. TechHelp worked with OX-GEN to develop the Sport-Ox Flexible O2 system for the recreational and therapeutic market that has drawn interest from the U.S. Ski Association and other sports related fields.

TechHelp also helped develop the OX-GEN Rigid O2 System, a non-pressurized oxygen generator that is a portable self-contained device. It is non-flammable and non-explosive and provides pure oxygen for non-professional medical use. OX-GEN recently received FDA approval for the Rigid O2 System by proving the system could deliver a minimum of 6 liters of oxygen a minute for 15 to 30 minutes. The units will sell for approximately \$140, about two-thirds the price of most pressurized oxygen containers. TechHelp developed Rigid O2 System prototypes that are being used to market the system to potential government, military, and industrial users. TechHelp is working with its state and federal government partners to help OX-GEN explore potential sources of funding (SBIR and MILTEC), and sales. OX-GEN has invested just over \$700,000 in developing the O2 delivery system and expects to see its first sales within the next year. The company plans to add professional staff, including a marketing director, director of manufacturing, and director of engineering. They plan to remain focused on product development and are looking for a manufacturing and distribution partner as the system nears the production stage.

##### Results:

\* Generated new design concept, product definition, preliminary design and analysis, prototype production and testing, and parts replication.

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- \* Received Federal Drug Administration approval for portable oxygen system.
- \* Has over 250 contacts interested in buying new product.
- \* TechHelp assisting company in applying for SBIR grant.

### **Testimonial:**

"During the two years we worked with TechHelp to develop this product, I was always impressed by TechHelp's flexibility and willingness to work closely with us to overcome challenges and meet our goals and timelines."

Frank Fosella, Jr., Chairman/President